

PROJECT MANAGEMENT BEST PRACTICES

ACHIEVING GLOBAL EXCELLENCE



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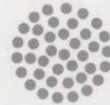


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HAROLD KERZNER, PH.D.

PROJECT MANAGEMENT BEST PRACTICES

Achieving Global Excellence

SECOND EDITION

HAROLD KERZNER



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Preface

For almost 40 years, project management was viewed as a process that might be nice to have but not one that was necessary for the survival of the firm. Companies reluctantly invested in some training courses simply to provide their personnel with basic knowledge on planning and scheduling. Project management was viewed as a threat to established lines of authority, and in many companies only partial project management was used. This half-hearted implementation occurred simply to placate lower- and middle-level personnel as well as selected customers.

During this 40-year period, we did everything possible to prevent excellence in project management from occurring. We provided only lip service to empowerment, teamwork, and trust. We hoarded information because the control of information was viewed as power. We placed personal and functional interests ahead of the best interest of the company in the hierarchy of priorities. And we maintained the faulty belief that time was a luxury rather than a constraint.

By the mid-1990s, this mentality began to subside, largely due to two recessions. Companies were under severe competitive pressure to create quality products in a shorter period of time. The importance of developing a long-term trusting relationship with the customers had come to the forefront. Businesses were being forced by the stakeholders to change for the better. The survival of the firm was now at stake.

Today, businesses have changed for the better. Trust between the customer and contractor is at an all-time high. New products are being developed at a faster rate than ever before. Project management has become a competitive weapon during competitive bidding. Some companies are receiving sole-source contracts because of the faith that the customer has in the contractor's ability to deliver a continuous stream of successful projects using a project management methodology. All of these factors have allowed a multitude of companies to achieve some degree of excellence in project management. Business decisions are now being emphasized ahead of personal decisions.

Words that were commonplace six years ago have taken on new meanings today. Change is no longer being viewed as being entirely bad. Today, change implies continuous improvement. Conflicts are no longer seen as detrimental. Conflicts managed well

can be beneficial. Project management is no longer viewed as a system entirely internal to the organization. It is now a competitive weapon that brings higher levels of quality and increased value-added opportunities for the customer.

Companies that were considered excellent in management in the past may no longer be regarded as excellent today, especially with regard to project management. Consider the book entitled *In Search of Excellence*, written by Tom Peters and Robert Waterman in 1982 (published by Harper & Row, New York). How many of those companies identified in their book are still considered excellent today? How many of those companies have won the prestigious Malcolm Baldrige Award? How many of those companies that have won the award are excellent in project management today? Excellence in project management is a never-ending journey. Companies that are reluctant to invest in continuous improvements in project management soon find themselves with low customer satisfaction ratings.

The differentiation between the first 40 years of project management and the last 10 years is in the implementation of project management on a companywide basis. For more than three decades, we emphasized the quantitative and behavioral tools of project management. Basic knowledge and primary skills were emphasized, and education on project management was provided only to a relatively small group of people. However, within the past 10 years, emphasis has been on implementation across the entire company. What was now strategically important was how to put 30 years of basic project management theory in the hands of a few into practice. Today it is the implementation of companywide project management applications that constitutes advanced project management. Subjects such as earned-value analysis, situational leadership, and cost and change control are part of basic project management courses today whereas 15 years ago they were considered advanced topics in project management. So, what constitutes applied project management today? Topics related to project management implementation, enterprise project management methodologies, project management offices, and working with stakeholders are advanced project management concepts.

This book covers the advanced project management topics necessary for implementation of and excellence in project management. The book contains numerous quotes from people in the field who have benchmarked best practices in project management and are currently implementing these processes within their own firms. Quotes in this book were provided by 10 CEOs, 5 Presidents, several COOs, CIOs, CFOs, senior VPs, VPs, global VPs, general managers, PMO directors, and others. The quotes are invaluable because they show the thought process of these leaders and the direction in which their firms are heading. These companies have obtained some degree of excellence in project management, and what is truly remarkable is the fact that this happened in less than five or six years. Best practices in implementation will be the future of project management well into the twenty-first century. Companies have created best practices libraries for project management. Many of the libraries are used during competitive bidding for differentiation from other competitors. Best practices in project management are now viewed as intellectual property.

Companies that are discussed in this book include:

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American Greetings	Motorola

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AT&T	Nortel
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Computer Associates	Perot Systems
Convergent Computing	Roadway Express
Churchill Downs, Inc.	Rockwell Automation
Comau	Satyam
Computer Sciences Corp.	SENTEL
Deloitte	Sherwin-Williams
Department of Defense	Siemens
DFCU	Slalom
Diebold	Star Alliance
DTE Energy	Synovus
EDS	Sypris Electronics
Enakta	Teradyne
Ericsson	Texas Instruments
EXEL	Tyco
General Motors	Visteon
Harris	Vitalize Consulting
Holcim	Westfield
Hewlett-Packard	WWF
IBM	Zurich America Insurance Co.
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Seminars and webinar courses on project management principles and best practices in project management are available using this text and my text *Project Management: A Systems Approach to Planning, Scheduling, and Controlling*, 10th edition (Wiley, Hoboken, New Jersey, 2009). Seminars on advanced project management are also available using this text. Information on these courses, E-learning courses, and in-house and public seminars can be obtained by contacting:

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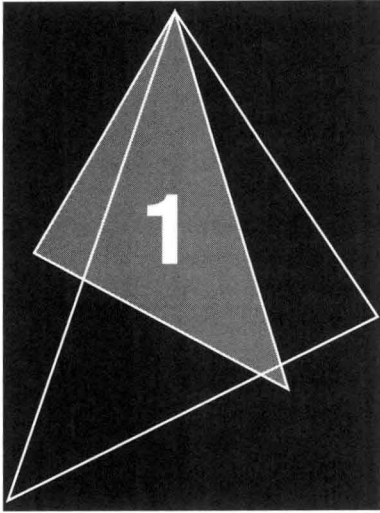
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Understanding Best Practices

1.0 INTRODUCTION

Project management has evolved from a set of processes that were once considered “nice” to have to a structured methodology that is considered mandatory for the survival of the firm. Companies are now realizing that their entire business, including most of the routine activities, can be regarded as a series of projects. Simply stated, we are managing our business by projects.

Project management is now regarded as both a project management process and a business process. As such, project managers are expected to make business decisions as well as project decisions. The necessity for achieving project management excellence is now readily apparent to almost all businesses. Steven Deffley, Project Management Professional (PMP), Global Product Manager at Tyco Electronics, believes that:

Achieving Project Management Excellence addresses how Project Management has evolved into a business process, providing concepts that can be employed to improve the effectiveness and financial contribution of an organization. Excellence is driven by a focus on critical success factors and key performance indicators as it relates to a project. Excellence in Project Management illustrates how the intellectual value of lessons learned can lead to a proprietary competitive advantage. Achieving Project Management Excellence demonstrates how Project Management has matured in encouraging and supporting an organization to perform at a higher level.

As the relative importance of project management permeates each facet of the business, knowledge is captured on best practices in project management. Some companies view this knowledge as intellectual property to be closely guarded in the vaults of the company. Others share this knowledge in hope of discovering other best practices. Companies are now performing strategic planning for project management.

One of the benefits of performing strategic planning for project management is that it usually identifies the need for capturing and retaining best practices. Unfortunately this is easier said than done. One of the

reasons for this difficulty, as will be seen later in the chapter, is that companies today are not in agreement on the definition of a best practice, nor do they understand that best practices lead to continuous improvement, which in turn leads to the capturing of more best practices.

1.1 PROJECT MANAGEMENT BEST PRACTICES: 1945–1960

During the 1940s, line managers functioned as project managers and used the concept of over-the-fence management to manage projects. Each line manager, wearing the hat of a project manager, would perform the work necessitated by his or her line organization and, when completed, would throw the “ball” over the fence in hopes that someone would catch it. Once the ball was thrown over the fence, the line managers would wash their hands of any responsibility for the project because the ball was no longer in their yard. If a project failed, blame was placed on whichever line manager had the ball at that time.

The problem with over-the-fence management was that the customer had no single contact point for questions. The filtering of information wasted precious time for both the customer and the contractor. Customers who wanted first-hand information had to seek out the manager in possession of the ball. For small projects, this was easy. But as projects grew in size and complexity, this became more difficult.

During this time period, very few best practices were identified. If there were best practices, then they would stay within a given functional area never to be shared with the remainder of the company. Suboptimal project management decision making was the norm.

Following World War II, the United States entered into the Cold War. To win a Cold War, one must compete in the arms race and rapidly build weapons of mass destruction. The victor in a Cold War is the one who can retaliate with such force as to obliterate the enemy. Development of weapons of mass destruction was comprised of very large projects involving potentially thousands of contractors.

The arms race made it clear that the traditional use of over-the-fence management would not be acceptable to the Department of Defense (DoD) for projects such as the B52 bomber, the Minuteman Intercontinental Ballistic Missile, and the Polaris submarine. The government wanted a single point of contact, namely, a project manager who had total accountability through all project phases. In addition, the government wanted the project manager to possess a command of technology rather than just an understanding of technology, which mandated that the project manager be an engineer preferably with an advanced degree in some branch of technology. The use of project management was then mandated for some of the smaller weapon systems such as jet fighters and tanks. The National Aeronautics and Space Administration (NASA) mandated the use of project management for all activities related to the space program.

Projects in the aerospace and defense industries were having cost overruns in excess of 200–300 percent. Blame was erroneously placed upon improper implementation of project management when, in fact, the real problem was the inability to forecast technology, resulting in numerous scope changes occurring. Forecasting technology is extremely difficult for projects that could last 10–20 years.

By the late 1950s and early 1960s, the aerospace and defense industries were using project management on virtually all projects, and they were pressuring their suppliers to use it as well. Project management was growing, but at a relatively slow rate except for aerospace and defense.

Because of the vast number of contractors and subcontractors, the government needed standardization, especially in the planning process and the reporting of information. The government established a life-cycle planning and control model and a cost-monitoring system and created a group of project management auditors to make sure that the government's money was being spent as planned. These practices were to be used on all government programs above a certain dollar value. Private industry viewed these practices as an overmanagement cost and saw no practical value in project management.

In the early years of project management, because many firms saw no practical value in project management, there were misconceptions concerning project management. Some of the misconceptions included:

- Project management is a scheduling tool such as PERT/CPM (program evaluation and review technique/critical-path method) scheduling.
- Project management applies to large projects only.
- Project management is designed for government projects only.
- Project managers must be engineers and preferably with advanced degrees.
- Project managers need a “command of technology” to be successful.
- Project success is measured in technical terms only. (Did it work?)

1.2 PROJECT MANAGEMENT BEST PRACTICES: 1960–1985

During this time period, with a better understanding of project management, the growth of project management had come about more through necessity than through desire, but at a very slow rate. Its slow growth can be attributed mainly to lack of acceptance of the new management techniques necessary for its successful implementation. An inherent fear of the unknown acted as a deterrent for both managers and executives.

Other than aerospace, defense, and construction, the majority of companies in the 1960s maintained an informal method for managing projects. In informal project management, just as the words imply, the projects were handled on an informal basis whereby the authority of the project manager was minimized. Most projects were handled by functional managers and stayed in one or two functional lines, and formal communications were either unnecessary or handled informally because of the good working relationships between line managers. Those individuals that were assigned as project managers soon found that they were functioning more as project leaders or project monitors than as real project managers. Many organizations today, such as low-technology manufacturing, have line managers who have been working side by side for 10 or more years. In such situations, informal project management may be effective on capital equipment or facility development projects and project management is not regarded as a profession.